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EXAMINER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/755,623	Applicant(s) LECOEUCHE, RENAUD J.	
	Examiner MICHAEL C. COLUCCI	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/10/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/10/2009 has been entered.

Response to Arguments

2. Applicants arguments with respect to claims 1-11 and 14-22 have been considered but are moot in view of the new grounds of rejection. Re claims 1, 11, and 19, Examiner has incorporated Bangalore et al. US 20050135571 A1 (hereinafter Bangalore) to address amendments, particularly *obtaining values for fields of a form*. See rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 11, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir US 20020035474 A1 (hereinafter Alpdemir) in view of Albayrak et al. US 6662163 B1 (hereinafter Albayrak) and further in view of Bangalore et al. US 20050135571 A1 (hereinafter Bangalore).

Re claim 1, Alpdemir teaches a computer readable storage medium having instructions, which when executed on a computer generate client side markup ([0140]) for a client in a client/server system, the instructions comprising:

a set of controls configured for use on a server remote from the client for defining a dialog and used to dynamically generate client side markup in accordance with the dialog ([0139]), the controls comprising at least a control for generating markup related to audible prompting of a question ([0226]) and for generating markup related to a grammar for recognition ([0169]), wherein the set of controls generate markup that is adapted to prioritize prompting of a question ([0337-0339]) and generate markup related to a grammar for recognition as a function of responses from a user ([0143-0144]), when at least one response includes an answer to the prompt that was given and additional information that is not an answer to the prompt that was given, wherein an additional prompt is then provided to the user concerning the additional information ([0132], *help* information) before returning to the selected order ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, that can start a users dialog over again);

a module, when executed on a process of a computer associated with the client, creates a dialog as a function of the controls, wherein the dialog follows a selected order of prompting and receiving input from a user as related to the order of the controls ([0217]), and departs from the selected order as a function of responses from the user ([0143-0144]), wherein the set of controls includes attributes that define a selected order for execution of the set of controls to generate the markup ([0222 & 02223] & Fig. 5 ordered set of commands/responses).

However, Alpdemir fails to teach a client side markup for a client in a client/server system

Albayrak teaches an interactive voice response system includes a server and a set of mobile clients. The server and clients include RF transceivers for exchanging messages over an RF channel. Each mobile client includes a microphone, a speaker or headset, a processor and a voice browser. The voice browser interprets voice pages received from the server. Upon receiving a particular voice page from the server, the voice browser outputs via the speaker voice prompts specified by the voice page. A speech recognition engine used by the voice browser converts voice responses from a user into a text response. The voice browser then performs an action based on the text response. The action taken may be to request a new voice page from the server, or to continue to interpret the current voice page. The server preferably includes an HTTP server module for receiving and responding to requests for voice pages from the mobile clients in accordance with a predefined protocol. The mobile clients each include a text-to-speech module for converting text in a voice page into voice prompts, and a digitized

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speech module for playing digitized voice data representing other voice prompts. The mobile clients also include a speech recognition module for recognizing words or data string within a user's voice responses in accordance with a user specific voice file received from the server (Albayrak Col. 3 lines 3-27).

Further, Albayrak teaches that Hypertext refers to a collection of computer-readable text documents containing links, that is, location references. A browser utilizes the links to facilitate moving its attention between linked documents. A voice browser is similar to a graphical browser in that it is a program that processes hypertext and presents the hypertext content in a specified format. The voice browser used in the preferred embodiment of this invention receives and outputs all information in the form of sound rather than having graphical input and output. The particular type of hypertext used in the preferred embodiment is based on VoiceXML. VoiceXML was designed by the VoiceXML Forum to create audio dialogs that feature digitized audio and speech recognition and to facilitate web-based development and content delivery. (Albayrak Col. 4 lines 11-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir to incorporate a client side markup for a client in a client/server system as taught by Albayrak to allow for a server-client voice browsing system, wherein markup language is utilized to convert text to speech, particularly for a mobile client that can prompt a user wirelessly (Albayrak Col. 3 lines 3-27).

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However, Alpdemir in view of Albayrak fails to teach obtaining a value for at least one field of a form

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to

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receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate obtaining a value for at least one field of a form as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058]), wherein rather than assuming a user does not need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did

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not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

Re claims 2, Alpdemir teaches the computer readable storage medium of claim 1 wherein the module creates a dialog ([0220]) as a function of activated controls ([0143-0144]).

Re claim 3, Alpdemir teaches the computer readable storage medium of claim 2 wherein controls are activated as a function of responses from the user ([0143-0144]).

Re claims 4, Alpdemir teaches the computer readable storage medium of claim 3 wherein the set of controls includes an attribute to indicate the selected order that each of the controls will be activated ([0337-0339]).

Re claim 5, Alpdemir teaches the computer readable storage medium of claim 1 wherein one of the controls provides means for defining a confirmation for generating markup related to confirming that a recognized result is correct ([0191]).

Re claim 6, Alpdemir teaches the computer readable storage medium of claim 1 and further comprising a second set of controls for generating markup related to visual rendering on a client, wherein at least one of the first-mentioned set of controls is

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associated with at least one of the controls of the second set of controls ([0362-0363] & Fig. 11-12).

Re claims 7 and 14, Alpdemir teaches the computer readable storage medium of claim 1 wherein the module maintains information related to an order of responses received from the user, and wherein the module departs from the selected order ([0337-0339]) to provide a prompt related to a previous [RLI0] response from the user in the information ([0143-0144]).

However, Alpdemir in view of Albayrak fails to teach providing a prompt related to a previous [RLI0] response from the user.

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

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Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not

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need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate providing a prompt related to a previous [RLI0] response from the user as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058], and Fig. 2A, voice to text input into fields on a form), wherein rather than assuming a user does not need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

Re claims 9 and 11, Alpdemir teaches a computer implemented method for performing recognition and/or audible prompting on a client in a client/server system, the method comprising:

defining a dialog with a set of controls for completing fields of a form, the set of controls comprising a plurality of question controls for generating audible prompts of questions and at least one answer control for generating markup related to a grammar used for recognition ([0139]), wherein the set of controls includes attributes defining a selected order of the question controls ([0226]) to prioritize prompting of the questions in

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the dialog and includes attributes for using a grammar for recognition as a function of responses from a user ([0337-0339]);

dynamically generating client side markup in accordance with the defined dialog on a server remote from the client ([0165]); and

creating the dialog on a client as a function of execution of the client side markup related to the controls using a processor of a computer, wherein the dialog follows a selected order of the question controls ([0217]) to obtain values from a user for fields of the form and includes storing a plurality of semantic items that maintain information related to responses received from the user, wherein creating the dialog comprises:

providing a first prompt for a first question control in the selected order ([0309]), the first question control being associated with a first field of the form;

However, Alpdemir fails to teach a client side markup for a client in a client/server system

Albayrak teaches an interactive voice response system includes a server and a set of mobile clients. The server and clients include RF transceivers for exchanging messages over an RF channel. Each mobile client includes a microphone, a speaker or headset, a processor and a voice browser. The voice browser interprets voice pages received from the server. Upon receiving a particular voice page from the server, the voice browser outputs via the speaker voice prompts specified by the voice page. A speech recognition engine used by the voice browser converts voice responses from a user into a text response. The voice browser then performs an action based on the text

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response. The action taken may be to request a new voice page from the server, or to continue to interpret the current voice page. The server preferably includes an HTTP server module for receiving and responding to requests for voice pages from the mobile clients in accordance with a predefined protocol. The mobile clients each include a text-to-speech module for converting text in a voice page into voice prompts, and a digitized speech module for playing digitized voice data representing other voice prompts. The mobile clients also include a speech recognition module for recognizing words or data string within a user's voice responses in accordance with a user specific voice file received from the server (Albayrak Col. 3 lines 3-27).

Further, Albayrak teaches that Hypertext refers to a collection of computer-readable text documents containing links, that is, location references. A browser utilizes the links to facilitate moving its attention between linked documents. A voice browser is similar to a graphical browser in that it is a program that processes hypertext and presents the hypertext content in a specified format. The voice browser used in the preferred embodiment of this invention receives and outputs all information in the form of sound rather than having graphical input and output. The particular type of hypertext used in the preferred embodiment is based on VoiceXML. VoiceXML was designed by the VoiceXML Forum to create audio dialogs that feature digitized audio and speech recognition and to facilitate web-based development and content delivery. (Albayrak Col. 4 lines 11-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir to incorporate a client side

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markup for a client in a client/server system as taught by Albayrak to allow for a server-client voice browsing system, wherein markup language is utilized to convert text to speech, particularly for a mobile client that can prompt a user wirelessly (Albayrak Col. 3 lines 3-27).

However, Alpdemir in view of Albayrak fails to teach obtaining a value for at least one field of a form

receiving a user response that includes an answer to the first prompt indicative of a value for the first field of the form, wherein the user response includes additional information that is not an answer to the first prompt and is associated with one or more of the semantic items;

providing an additional prompt for a question control associated with a second field of the form based on the one or more semantic items associated with the additional information, wherein providing the additional prompt departs from the selected order of the question controls; and

after the user has provided an answer to the additional prompt, returning to the selected order of the question controls to provide a next prompt for a next question control in the selected order.

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination

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address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or

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from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate obtaining a value for at least one field of a form, receiving a user response that includes an answer to the first prompt indicative of a value for the first field of the form, wherein the user response includes additional information that is not an answer to the first prompt and is associated with one or more of the semantic items, providing an additional prompt for a question control associated with a second field of the form based on the one or more semantic items associated with the additional information, wherein providing the additional prompt departs from the selected order of the question controls, and after the user has provided an answer to the additional prompt, returning to the selected order of the question controls to provide a next prompt for a next question control in the selected order as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058], and Fig. 2A, voice to text input into fields on a form), wherein rather than assuming a user does not

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need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

5. Claims 8-10, 15-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir US 20020035474 A1 (hereinafter Alpdemir) in view of Albayrak et al. US 6662163 B1 (hereinafter Albayrak) and Bangalore et al. US 20050135571 A1 (hereinafter Bangalore) and further in view of Takebayashi et al. US 5357596 A (hereinafter Takebayashi).

Re claim 8, Alpdemir teaches the computer readable storage medium of claim 7 wherein the set of controls includes an attribute to indicate whether a response to a prompt will be maintained in the information related to the order of responses received from the user ([0337-0339]).

Re claims 9, 16 and 21, Alpdemir teaches the computer readable storage medium of claim 8 wherein module maintains the information related to an order of responses ([0337-0339]) received from the user as a stack.

However, Alpdemir in view of Albayrak and Bangalore fails to teach an order of responses received from the user as a stack

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and Bangalore to incorporate an order of responses received from the user as a stack as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager, wherein changes in user responses can be monitored for an improved recognition scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claims 10 and 20, Alpdemir in view of Albayrak and Bangalore fails to teach the computer readable storage medium of claim 9 wherein the stack is of selected

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length such that the oldest information related to the oldest received response is removed when information is received related to the latest response from the user.

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Further, Takebayashi teaches the confirmation for the partial change of the order such as addition, replacement, and deletion is carried out by using only the speech response and the text data of the speech response. However, the visual information may also be used for the confirmation of the partial change of the order. In such a case, the display of the content visualizing image indicating the entire order may be interrupted temporarily, if desired. (Takebayashi Col. 27 lines 8-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and Bangalore to incorporate a stack that is of selected length such that the oldest

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information related to the oldest received response is removed when information is received related to the latest response from the user as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager and older data is removed as the most recent response is received, wherein changes in user responses can be monitored for an improved recognition scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claim 15, Alpdemir teaches the computer implemented method of claim 14 wherein the set of controls includes an attribute to indicate whether a response to a prompt will be maintained in the information related to the order of responses received from the user ([0337-0339]), and wherein creating the dialog includes maintaining information related to an order of responses received from the user as a function of the corresponding attribute for a prompt ([0226]).

Re claim 18, computer implemented method of claim 14, wherein defining a dialog includes logic for modifying the maintained information related to an order of responses received from the user([0337-0339]), and wherein creating the dialog includes modifying the maintained information pursuant to the logic ([0213]).

Re claim 17, Alpdemir in view of Albayrak and Bangalore fails to teach the computer implemented method of claim 16, wherein maintaining the ordered list comprises maintaining the ordered list in a stack

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Further, Takebayashi teaches the confirmation for the partial change of the order such as addition, replacement, and deletion is carried out by using only the speech response and the text data of the speech response. However, the visual information may also be used for the confirmation of the partial change of the order. In such a case, the display of the content visualizing image indicating the entire order may be interrupted temporarily, if desired. (Takebayashi Col. 27 lines 8-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and

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Bangalore to incorporate maintaining the ordered list comprises maintaining the ordered list in a stack as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager and older data is removed as the most recent response is received, wherein changes in user responses can be monitored for an improved recognition scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claim 22, Alpdemir teaches the system of claim 20 wherein the ordered list is indicative of a list of semantic items ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, where the best matching data to a user response is selected from a set of data).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

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